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APPLICATION NO	FILING DATE	FIRST NAMED INVENTOR	A FTORNEY DOCKET NO.	CONFIRMATION NO.
09 941.343	08 29 2001	Seng Tan	1511(Wright)	5856
30010	7590 07 03 2003			
AUZVILLE JACKSON, JR.			EXAMINER	
8652 RIO GR Richmond	RANDE ROAD , VA 23229		LISH, PETER J	
			ART UNIT	PAPER NUMBER
			1754	
			DATE MAILED: 07-03-2003	

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)
			7
Office Action Summary		09/941,343	TAN ET AL.
	omoe notion cummary	Examiner	Art Unit
	The MAILING DATE of this communication	Peter J Lish	1754
	or Reply	i appears on the cover sneet w	itii tile correspondence address
THE I - External after - If the - If NC - Failur - Any r	ORTENED STATUTORY PERIOD FOR R MAILING DATE OF THIS COMMUNICATION in significant may be available under the provisions of 37 Cl SIX (6) MONTHS from the mailing date of this communication is period for reply specified above is less than thirty (30) days. Operiod for reply is specified above, the maximum statutory pure to reply within the set or extended period for reply will, by a reply received by the Office later than three months after the reply are to remain adjustment. See 37 CFR 1.704(b).	ON. FR 1.136(a). In no event, however, may a in. a reply within the statutory minimum of thir eriod will apply and will expire SIX (6) MON statute, cause the application to become Al	reply be timely filed  ty (30) days will be considered timely.  NTHS from the mailing date of this communication.  BANDONED (35 U.S.C. § 133).
1)[	Responsive to communication(s) filed on	04/18/03	
2a)		This action is non-final.	
3)	Since this application is in condition for a		atters, prosecution as to the merits is
,—	closed in accordance with the practice union of Claims		
4)	Claim(s) 1-11 and 13-24 is/are pending in	the application.	
	4a) Of the above claim(s) is/are with	ndrawn from consideration.	
5)	Claim(s) is/are allowed.		
6)[-	Claim(s) <u>1-5,10,11 and 13-24</u> is/are reject	ed.	
7)[-	Claim(s) 6-9 is/are objected to.		
8)	Claim(s) are subject to restriction a	nd/or election requirement.	
pplicati	ion Papers		
9)[	The specification is objected to by the Exa	miner.	
10)[	The drawing(s) filed on is/are: a)	accepted or b) objected to by t	the Examiner.
	Applicant may not request that any objection		
11)[	The proposed drawing correction filed on _		disapproved by the Examiner.
, a) 🖂 .	If approved, corrected drawings are required		
,	The oath or declaration is objected to by th	e Examiner.	
	under 35 U.S.C. §§ 119 and 120		
	Acknowledgment is made of a claim for fo	reign priority under 35 U.S.C.	§ 119(a)-(d) or (f).
a)[	☐ All b)☐ Some * c)☐ None of:		
	1. Certified copies of the priority docur		
	2. Certified copies of the priority docur		
* 5	3. Copies of the certified copies of the application from the International See the attached detailed Office action for a	al Bureau (PCT Rule 17.2(a)).	
14) 🗌 A	Acknowledgment is made of a claim for don	nestic priority under 35 U.S.C.	§ 119(e) (to a provisional application)
	)  The translation of the foreign language  Acknowledgment is made of a claim for dor	• • • • • • • • • • • • • • • • • • • •	
tachmen		• •	
☐ Notic	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948 mation Disclosure Statement(s) (PTO-1449) Paper No	3) 5) Notice of	Summary (PTO-413) Paper No(s) Informal Patent Application (PTO-152)

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### **DETAILED ACTION**

Applicant's arguments filed 18 April 2003 have been fully considered but they are not persuasive. Applicant argues that lanthanum series oxides are not disclosed in the prior art of reference. This limitation, however, is located in claims 6-9, but not in any of claims 1-5 or 11.

Regarding the amendment to claim 1, the addition of the limitation "eliminating the stabilization step" does not overcome the rejection drawn toward the indefiniteness of the claim. It remains unclear as to whether a stabilization step occurs, given that the language of claim 1 recites "shortening or elimination of said stabilizing step" as well as "stabilizing and carbonizing said carbon precursor".

Regarding applicant's arguments regarding claim 23, it is noted that while the use of metal chlorides is taught in the example of Hamling, the metal chlorides are converted to metal oxides, yielding a carbon fiber containing metal oxides.

The rejections of claims 6-9 and 17-20 under 35 U.S.C. 112, second paragraph, are withdrawn in response to the amendment.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

## Claim Rejections - 35 USC § 112

Claims 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 states that in a process including the steps of forming a carbon precursor, and stabilizing and carbonizing said carbon precursor. It later states that the catalyst permits

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elimination of the stabilization step. Claims 1 and 12 are thus inconsistent in the use of a stabilization step. Additionally, the use of the term "at the atomic level" in claims 1 and 12 is unclear.

Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 10 states that the catalyst is selected "from the group consisting of... iron oxide". Because iron oxide is not a lanthanum series oxide, it is indefinite as to the dependency of claim 10 upon claim 9, which recites the limitation that the catalyst oxide is a lanthanum, series oxide.

Claims 13-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 13-22 are dependent upon canceled claim 12.

# Claim Rejections - 35 USC § 102

Claims 1-3, 10, 13-14, 21, and 24 are rejected under 35 U.S.C 102(b) as being anticipated by Tachibana (USPN 4.970,189).

Tachibana is applied as in the previous office action. No difference is seen between the product of Tachibana and that of the instantly claimed invention.

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Claims 4-5 and 15-16 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Tachibana.

The rejection of the previous office action is maintained in its entirety and incorporated herein by reference.

Claims 1,3, 11 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Sawaki et al. (USPN 4,840,762).

The rejection of the previous office action is maintained in its entirety and incorporated herein by reference.

Claim 23 is rejected under 35 U.S.C. 102(b) as being anticipated by Hamling (USPN 3,385,915).

The rejection of the previous office action is maintained in its entirety and incorporated herein by reference.

Claim 23 is rejected under 35 U.S.C 102(b) as being anticipated by Ikegami et al. (USPN 4,362,646).

Ikegami et al. teaches a carbon fiber containing iron oxide in a weight percentage of between 0.01 and 1 wt % (column 8, lines 15-26). No difference is seen between the carbon fiber of Ikegami et al. and that of the instantly claimed invention.

Allowable Subject Matter

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Claims 6-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter J Lish whose telephone number is 703-308-1772. The examiner can normally be reached on 9:00-6:00 Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman can be reached on 703-308-3837. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-305-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

PL

June 26, 2003

STUART L. HENDRICKSON PRIMARY EXAMINER

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